

Date: Sun, 22 May 94 04:30:31 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V94 #157
To: Ham-Digital

Ham-Digital Digest Sun, 22 May 94 Volume 94 : Issue 157

Today's Topics:

 9600 bps radio modems (2 msgs)
 9600 Packet / Motorola Transcievers
 ??Type of cable from Mac to TNC??
 [SUMMARY] PK-232MBX vs. MFJ-1278B
 AEA CP-1
 Baycom circuit?
 JV-Fax and Soundblaster Cards
 RRADM FAQ?
 TNOS and NETROM.
 TNOS Configurations files and facilities needed.

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 20 May 94 07:41:00 GMT
From: agate!ihnp4.ucsd.edu!swrinde!emory!cherry.atlanta.com!nanovx!wa4mei!totrbbs!
steve.diggs@ucbvax.berkeley.edu
Subject: 9600 bps radio modems
To: ham-digital@ucsd.edu

Brian,

I appreciated your msg., as I have been working steadily over the past
13 months to get 9600 packet working for one of our LAN groups here in
Atlanta, the East Atlanta LAN. It's tough, really tough. I'm presently
experienced with the MFJ1270 and their kit, a G3RUH actually made by
Paccomm, and a TAPR 9600 kit, which I installed in my PK232MBX. Each has

some uniquely good and bad qualities. I can't really say that sloppy DCD performance has been at the core of it; or at least at my experience level I don't think it has.

-> work very well. Those circuits chatter; they occasionally false on
-> background noise, and can be fooled by interference of various kinds.

I haven't seen either the G3RUH or the TAPR modem false indicate DCD, even once. I've seen it not pick up valid data (or so it looked to me) but not false.

I've been trying to work simplex right now; we don't have a full duplex repeater up yet; so we're limited to that. Also, I'm experimenting with half-duplex without a repeater.

I'm at the state where I can get each system to regularly decode another's beacon text, I can connect dependably (with an average of 1-2 retries) yet when I use mailbox features to simulate more robust traffic, often I get into retry hell. How can that be? How can I read a beacon great, connect great, just not put any meaningful amount of data through? Any ideas?

Regards,
Steve Diggs, KB4ZTN
East Atlanta LAN
9600 Packet Project Manager

Top Of The Rock BBS - Lilburn, GA SYSOP: Steve Diggs
UUCP: tottrbbs.atl.ga.us Snailmail: 4181 Wash Lee Ct.
Phone: +1 404 921 8687 Lilburn, GA 30247-7407

Date: 21 May 94 10:13:00 GMT
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!cherry.atlanta.com!
nanovx!wa4mei!tottrbbs!steve.diggs@uchvax.berkeley.edu
Subject: 9600 bps radio modems
To: ham-digital@ucsd.edu

-> What's wrong with using a squelch-derived DCD? It's possible to make
-> a squelch that's fast and reliable -- in the Kantronics D4-10, the
-> squelch response time is <well> under 10 milliseconds, and it is very
-> solid.
-> Is it really true that normal VHF radio squelches today are horribly
-> slow? Has anyone measured the squelch speed of popular radios being
-> used for 9600? It may be that even the slower ones could be made
-> acceptably fast by clipping out a capacitor or two...

We're getting the cart before the horse in this message thread. 9600 packet is an IF interface; squelch control is a AF section function. The audio at the IF is always unsquelched, and rightly so. Further, <anything> do to with the AF section screws 9600 transmissions up due to the normal pre-emphasis and de-emphasis curcuitry in the AF section. It seems that 9600 packet audio requires it's own custom de-emphasis based on the exact discriminator used in order to get the eye pattern right to the modem. Hence the difficulty of getting the IF interface right.

So...bottom line is...doesn't matter how fast/slow the squelch is...you're way on the IF side of the squelch curcuit anyway.

I clearly state here that this is an area for ongoing discussions, as I am not satisfied with the work I've done so far in 9600 packet, so any help/comments/objections is appreciated.

Regards,
Steve Diggs KB4ZTN

Top Of The Rock BBS - Lilburn, GA
UUCP: totrbbs.atl.ga.us
Phone: +1 404 921 8687

SYSOP: Steve Diggs
Snailmail: 4181 Wash Lee Ct.
Lilburn, GA 30247-7407

Date: 20 May 94 07:28:00 GMT
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!cherry.atlanta.com!
nanovx!wa4mei!totrbbs!steve.diggs@ucbvax.berkeley.edu
Subject: 9600 Packet / Motorola Transcievers
To: ham-digital@ucsd.edu

Daniel,
I caught your broadcast response offering info. on above subject.

I'm looking for interface info on adapting the Mitrek and Micor radios to 9600 baud use. Specifically, the modem interface and full duplex modifications.

I would appreciate you forwarding any info you have. I am forming a conference and file area on my ham radio BBS dedicated to 9600 packet. Perhaps, this will make it easier for hams to complete the interface in the future.

Regards,
Steve Diggs,KB4ZTN

Top Of The Rock BBS - Lilburn, GA
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Phone: +1 404 921 8687

SYSOP: Steve Diggs
Snailmail: 4181 Wash Lee Ct.
Lilburn, GA 30247-7407

Date: 21 May 94 22:09:28 GMT
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!newsxfer.itd.umich.edu!
zip.eecs.umich.edu!umn.edu!dialup-2-225.gw.umn.edu!krueg010@ucbvax.berkeley.edu
Subject: ??Type of cable from Mac to TNC??
To: ham-digital@ucsd.edu

> Newsgroups: rec.radio.amateur.digital.misc

A "typical" modem cable will not work correctly with HostMaster for the Macintosh. Most "High Speed" modem cables will work ok. Kantronics Host Mode uses hardware handshaking.

I've used a Radio Shack RS232 Jumper Box to convert Apple 1200 baud modem cables to work with HostMaster. I can give you the wiring diagram if you need it.

BTW, I wrote (and support) HostMaster for the Macintosh for Kantronics.

73,
Kevin, N0IOS
krueg010@maroon.tc.umn.edu

Date: Sun, 22 May 1994 08:35:25 GMT
From: vigra.com!steve@network.ucsd.edu
Subject: [SUMMARY] PK-232MBX vs. MFJ-1278B
To: ham-digital@ucsd.edu

I got a lot of helpful replies to my recent "PK-232MBX vs. MFJ-1278B" post. Thanks much! Here's what I learned:

Most people strongly prefer AEA's gear over MFJ. Apparently, MFJ's quality control leaves something to be desired. Some have had better luck than others, but some replies indicate that MFJ does much poorer with weak signal HF, and the MFJ leaks significant amounts of RF, which hurts some more than others. The filtering on the PK-232 is much better than the MFJ's, and the tuning indicator is more useful.

Both units are about equal for local VHF packet, where filtering and discrimination isn't too much of an issue. Many recommended checking

into the KAM units or PK900 as well, but I haven't yet.

ROM upgrades for the PK-232 are more expensive (\$75 + \$25 for docs) than the MFJ upgrades (\$25). If you plan on upgrading often, this may be an issue.

It's true that only the MFJ does SSTV and shaded Fax, so for those who use it for that, the AEA can't substitute. However, most replies recommended getting a basic Fax-only box if Fax is going to be a significant factor. The AEA-FAX (~\$100 hardware & software) is well recommended.

Apparently, AEA doesn't provide or make available any software to decode the Fax data from the PK-232, making it pretty useless. MFJ is a better about it, but doesn't get along with Windows very well. The MFJ software may also be minimally copy-protected, which seems odd.

The internal BBS feature on the MFJ (pbbs) seems a bit better than the PK-232's (PakMail). People like the CHAT command and some auto-forwarding features. It sounds like gobs of RAM aren't really an issue for personal mailboxes with medium traffic.

Overall, it sounds like the PK-232 is a much more reliable unit for Packet and other modes, but if SSTV or Fax are critical, MFJ or specialized boxes are the only option. Many suggested starting with the inexpensive Baycom (~\$50), but it only work's on DOS machines.

Thanks very much for all your responses! Especially these helpful folks:

barry@w2up.wells.com (Barry Kutner)
Kok Chen <kchen@apple.com>
kriss@AUSTIN.LOCKHEED.COM (R M Kriss)
gsmlrn@gsm001.mendelson.com (Geoffrey S. Mendelson)
gregg@plains.NoDak.edu (Joe Gregg)
jwl@sedist.cray.com (Jim Lynch)
mm1@Hounix.ORG (John Donaldson)
levine@jericho.mc.com (Bob Levine)

Happy Hacking!

-Steve

Steve Haehnichen
steve@vigra.com

Vigra, Inc. San Diego, CA
(619) 597-7080 x116 Fax: (619) 597-7094

Date: 20 May 1994 17:10:02 -0400
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!
howland.reston.ans.net!gatech!udel!news2.sprintlink.net!news.sprintlink.net!
deathstar.cris.com!starcore.cris.com!not-for-mail@@.

Subject: AEA CP-1
To: ham-digital@ucsd.edu

In article <Cq3wsr.9r7@cup.hp.com>, Tom Graham wrote:

>I have acquired an ancient(?) AEA CP-1 Computer Patch for RTTY and CW.

> software to use this thing on an IBMPC clone

There are two programs that I know will work... One is TOR... I don't remember the version... I think the last was TOR30x.ZIP... This was shareware... I also forgot the author...

The software that I use is BMK-MULTY... I am using a HAL CRI-200 modem... BMK-MULTY, written by G4BMK, is the ultimate RTTY/AMTOR/PacTOR/CW software for dumb modems... While the initial cost is high, and the software is not resaleable, because it is encoded with your callsign, it allows the use of simple, good and affordable old-style HF modems... Upgrading your modem is then relatively easy...

Check the back of QST for info on BMK-MULTY...

73... Marv...

+++ Marv Uphaus -- Muphaus@cris.com -- CompuServe: 72122,1253 ---
+++ U.S. Mail: 4031 Airport Blvd. #49 -- Mobile, AL 36608 USA ---
+++ Packet Radio: K4BVG @W4IAX.#MOBAL.AL.USA.NA Ph: 205 343-9256 ---

Date: 21 May 94 19:07:46 GMT
From: agate!howland.reston.ans.net!usc!sdd.hp.com!portal.com!portal!combdyn!
lhaven.UUmh.Ab.Ca!Pj_Butts@ucbvax.berkeley.edu
Subject: Baycom circuit?
To: ham-digital@ucsd.edu

In a message dated Fri 20 May 94 10:43, Darryl.linkow@ledge.com (darryl Lin wrote:

DL> Newsgroups: rec.radio.amateur.digital.misc
DL> Subject: Baycom circuit?
DL> From: darryl.linkow@ledge.com (Darryl Linkow)
DL> Path: dres.dnd.ca!netfs.dnd.ca!ub!news.kei.com!yeshua.marcam.com!usc!e
DL> lroy.jpl.nasa.gov!netline-fddi.jpl.nasa.gov!nntp-
DL> server.caltech.edu!news.claremont.edu!kaiwan.com!ledge!darryl.linkow
DL> Distribution: world
DL> Message-ID: <cf.1168.435.0N2EEAFD@ledge.com>
DL> Date: Wed, 18 May 94 20:44:00 -0800

DL> Organization: The Ledge PCBoard: Lake View Terrace, CA: (818) 896-
DL> 2007
DL> Lines: 15

DL> I have downloaded the Baycom software and read the manual. From
DL> what I can understand, this software let's me use do packet without
DL> a TNC. What I don't understand is how I connect my HT to my
DL> computer. The manual shows some inputs to a serial port, but don't
DL> I need a modem as well? Also, there is something about a small
DL> circuit board to interface the radio to the RS-232 port. Anyone
DL> have any info on this? Also, is anyone using Baycom? If so, are
DL> you happy with it? Or should I spend a bunch of money and buy a
DL> TNC? I am new to ham radio (I am still waiting for my license, 7
DL> weeks now!) and don't know if I will like packet, so I am looking
DL> to get my feet wet at a low cost, to see if I like it. Any info
DL> would be appreciated.

DL> ---

DL> ~ OLY 2.2 ~ Darryl Linkow (818)346-5278 9 am - 5 pm PDT
I HAVE BEEN RUNNING BAYCOM SOFTWARE FOR AWHILE NOW AND I LOVE IT.
I HAVE ADDED THE YAPP DRIVER AS WELL AS A 7PLUS ENCODER/DECODER.
YOU WILL NEED A BAYCOM MODEM TO CONNECT THIS TO YOUR RIG.
I RUN ONE THAT IS A KIT FROM A&A ENGINEERING.
THE BP-1 FROM TIGERTRONICS WORKS NOT TOO BAD EITHER BUT IT DRAWS IT'S
POWER FROM YOUR RS-232 PORT SO I PREFER THE A&A UNIT AS IT HAS IT'S OWN
POWER SUPPLY. IF YOU ARE INTERESTED IN MY MODIFIED VERSION OF BAYCOM,
JUST DROP ME A LINE AND I WILL SEE WHAT WE CAN DO.
73 FROM VE6PJB

-- Via DLG Pro v1.0

Preferred: Pj_Butts@LHaven.UUmh.AB.CA
Alternate: Pj.Butts@f3002.n134.z1.fidonet.org

Date: Sat, 21 May 94 10:13:05 -0500
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!lll-winken.llnl.gov!noc.near.net!
news.delphi.com!usenet@network.ucsd.edu
Subject: JV-Fax and Soundblaster Cards
To: ham-digital@ucsd.edu

Jim

I found the same thing when I examined the docs as well. It appears that
there must be some provision for sound boards as you have the ability to
direct the output of the program to the speaker, serial port, parallel port,
or serial device.

A friend of mine uses the logitech board and has no problem in getting the program to run on that board. The problem appears to be the Sound blaster board only.

73 and thanks.

Dave

N8CLF @ WA6HAM.#NOCAL.CA.USA.NA

Date: 21 May 94 17:28:17 GMT
From: agate!iat.holonet.net!danielr@ucbvax.berkeley.edu
Subject: RRADM FAQ?
To: ham-digital@ucsd.edu

Where do I find the FAQ for the group, or when will it be posted again?

An intrigued newbie..

Date: 21 May 94 21:08:01 GMT
From: agate!usenet.ins.cwru.edu!howland.reston.ans.net!EU.net!ub4b!
idefix.CS.kuleuven.ac.be!news.fundp.ac.be!pbj@ucbvax.berkeley.edu
Subject: TNOS and NETROM.
To: ham-digital@ucsd.edu

Hello,

I see there's no NETROM facilities into the TNOS compiled distribution.
I have some difficulties to recompile the TNOS with BC 3.1.
I ask if someone includes the NETROM facilities into the TNOS and if
it's possible to send me the exe.

I test the TNOS on a 286 and sometimes the system hangs and stops.
I assume it's probably due to a lack of memory (only 2048 K) because
the
system stops when there are some connected features and only 12000 Bytes
free.

Could you help me to boost the memory process.

Many thanks.

Pascal.

Date: 21 May 94 20:54:25 GMT
From: agate!howland.reston.ans.net!EU.net!ub4b!idefix.CS.kuleuven.ac.be!
news.fundp.ac.be!pbj@ucbvax.berkeley.edu
Subject: TNOS Configurations files and facilities needed.
To: ham-digital@ucsd.edu

Hello,

I try to use the NEWS facilities into TNOS so called NEWS Center.
Unfortunately, I don't see any groups or like that when I connect the
NEWS Center. I suppose I must configure some files. Into the
autoexec.nos I start the NEWS, INFO and TUTOR server. At first, I try
to have a NEWS center with more than two choices. I give the names for
these facilities. But I only have two choices.
Into the directory NEWS or NNEWS, some files must be configured I
suppose.
Into the directories INFO and TUTOR it's probably the same.
Could someone help me to find the proper configurations to have
NEWSgroups.
Could someone help me to find or send me configurations files samples.

Best regards and many thanks.

Pascal.

End of Ham-Digital Digest V94 #157
